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10/583,120

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Carine Boursier

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EXAMINER

OBAYANJU, OMONIYI

ART UNIT

PAPER NUMBER

2617

NOTIFICATION DATE

DELIVERY MODE

02/16/2011

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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| | | | |
|------------------------------|------------------------|---------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 10/583,120 | BOURSIER ET AL. | |
| | Examiner | Art Unit | |
| | OMONIYI A. OBAYANJU | 2617 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 December 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2,4-7 and 9-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2,4-7 and 9-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

Applicant's arguments filed 12/14/2010 have been fully considered but they are not persuasive.

In **regards to the independent claim 18, the Applicant argued that** the rejection under 35 U.S.C. § 112, first paragraph is invalid. Therefore the Applicant provided various arguments to show the specification clearly supported the at least claimed limitations.

First the Applicant recited **page 7, lines 5-15**, to show support i.e.

In order to secure the channel 6 and to perform any necessary authentications between the storage support 2 and the module 31, **the support 2 and/or the module can store encryption keys adapted to the desired type of encryption or authentication. The types of encryption ... to be used are already known.** It is possible, in particular, to consider using session keys or static keys.

The integrity of the IMEI can be protected by a cryptographic calculation, which will be sent over the secure channel 6 to the secure module 31.

The Applicant further agreed that the specification never mentioned anything about "decrypting" or "decryption" "by a second key". However, the Applicant argued that the "disclosure of "encryption" encompasses both "encrypting" and decrypting". Also, the Applicant referred to the definition of "encryption" in the "*McGraw-Hill Dictionary of Scientific and Technical Terms*" which stated that "coding of a clear text message by a transmitting unit so as to prevent unauthorized eavesdropping along the

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transmission line; the receiving unit **uses the same algorithm as the transmitting unit to decode** the incoming message." (Emphasis Added).

In **response the Examiner respectfully disagrees with the Applicant's** arguments. Given the terms in the claimed limitation its plain meaning, encryption (encoding or coding or encipher) is totally opposite and/or different from decryption (decoding or decipher) as it is well known by one of ordinary skill in the art.

Second, **for argument sake, assuming it is inherent for an encryption** in a system to also include a decrypting or decryption method, the Applicant's specification does not inherently support the claimed limitations. As stated in the claim, the Applicant specifically claimed that the encryption was performed with "a first key" while the decrypting process was performed with "a second key" (different key). Therefore, in contrast to the Applicant's own argument and/or statement i.e. "the receiving unit **uses the same algorithm as the transmitting unit to decode** the incoming message." (Emphasis Added). The Applicant's claimed limitations do not use the "same algorithm" for encoding and decoding, the Applicant's claimed limitations referred to two different algorithms (first key associated with storage support module, and another second key associated with secure electronic module).

In conclusion, the Applicant's argument with respect to the (Dictionary) definition is invalid and/or not persuasive. Furthermore, the Applicant's specification failed to specifically mention "a first key associated with the storage support module" and "a

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second key (**different key**) associated with secure electronic module”, wherein an encryption is performed with a first key, and a **decryption is performed with a second key** (Emphasis Added).

In **regards to the independent claim 18, the Applicant further repeated a similar** argument which was previous addressed i.e. neither of the prior art references (Simmons and Portalier) teaches the at least claimed limitation “establishing...a secure communication channel”.

In **response the Examiner respectfully disagrees with the Applicant’s** arguments. The Examiner will not continue to repeat the same and/or similar responses. Therefore, the Applicant is referred to the (**respond to argument**) section of the office action mailed **03/29/2010**.

The **Applicant further argued and/or alleged that** the "Examiner apparently did not give the claimed "encrypt[ing]... the IMEI using the first key" and "decrypt[ing] the encrypted IMEI received from the storage support module using the second key" patentable weight because he does not believe these features are sufficiently supported by the specification.

In **response the Examiner respectfully disagrees with the Applicant’s** arguments. First the claimed limitations are not clearly supported by the original

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specification on record. Therefore, given the claims its broadest reasonable interpretation, Simmons clearly inherently teaches in **pg. 4, pp0047**, the claimed first and second keys (fixed keys in both the SIM 20, and the ME 10). Also, Simmons in **pp0039, pp0047, pp0049, pp0052**, teaches the claimed encrypting and decrypting between the storage support module and the secure electronic module using the first and second keys (challenge process and/or authentication between the ME 10 and SIM 20 based on the fixed keys).

Thus, given the claimed limitations its broadest reasonable interpretation, the claim does not uniquely and particularly define the limitations so as to distinguish from the applied prior art. During patent examination, the claims must be given their broadest reasonable interpretation. See also MPEP §2111. The limitations are broadly claimed, therefore, broadly interpreted as discussed above.

Finally, **the Applicant argued that the secondary prior art reference** (Portalier) fails to “say anything with regard to a “network grant[ing] access to the handset without further authentication of the authenticated IMEI”.

In **response the Examiner respectfully disagrees with** the Applicant's arguments. First in **pg. 1, Portalier** clearly teaches “method for a putting a mobile telephone into service” and Mobile telephony in the filed of GSM applicants. Furthermore, **pg. 5, lines 18-27** clearly teaches and/or stated that ***“should the comparison be successful, the putting into service of the mobile telephone is***

permitted. *This is done especially through the transmission, by means of the connectors 11 and 12, of a piece of IMSI subscriber identity information, herein 25, also contained in the circuits in such a way that this identity information is transmitted by the antenna 7 to the base station 19...the base station allows the mobile telephone to be put into service...* (Emphasis Added). Therefore as discussed above, the base station allow and/or permit mobile telephone to be put into service after the successful authentication or comparison process.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 18-20, are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

At least in light of the Applicant's specification as a whole, there was nothing mentioned and/or described to support the newly added or amended limitations i.e. at least in part **“decrypt, by the secure electronic device, the encrypted IMEI received from the storage support module using the second key”**. Therefore, the Applicant described two different and/or separate specific process of decrypting by a second key,

and encrypting by a first key as stated in the amended claimed limitations which were never mentioned and/or inconsistent with Applicant's specification. Therefore, the introduction of new terms and/or limitations that are not supported and/or clearly described by the specification raises the issue of new matter.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2, 4-7, 9, 11-16, and, 18-20, are rejected under 35 U.S.C. 103(a) as being unpatentable over Simmons (US Publication No. 20040043792) in view of Portalier et al (UK Patent Application GB2355892).

As to **claims 18, 19, 20, 5, and 12**, Simmons teaches a telephone handset, comprising (fig. 1, #10): a storage support module storing an International Mobile Equipment Identity (IMEI) associated with an operator of a communication network and a first key (pg. 2, pp 0026, lines 1-4, and pp0039); a secure electronic module storing a second key (SIM, pg. 1, pp0006, fig. 3, and pp0051); a processor (fig. 1, Microcontroller); a memory device including program instructions that, when executed by the processor, control the handset to: authenticate, by the secure electronic module, the storage support module (pg. 3, pp 0030); establish, in the event the secure

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electronic module determines that the storage support module is authentic, a communication channel between the storage support module and the secure electronic module (pg.3, pp0042, pp0049); encrypt (authenticate) by the storage support module, the IMEI using the first key (pg. 3, pp0039, and fig. 3); transmit, via a communication channel, the encrypted (authenticated) IMEI from the storage support module to the secure electronic module (pg. 4, pp 0049 lines 9-12, and fig. 3); decrypt (verify), by the secure electronic device, the encrypted (authenticated) IMEI received from the storage support module using the second key (pg. 3, pp0042, pp0039, and pp0018); enable, by the secure electronic module, the handset to access the communication network in the event the secure electronic module determines that the decrypted (verified) IMEI received from the storage support module is authentic (pg. 3, pp0028, pp0042, pp0039, and pp0018, fig.1, and fig. 3). However, Simmons fails to explicitly teach an encrypted communication channel between the first data storage device and the second data storage device, and access, by the handset, the communication network using the authenticated IMEI, wherein the network grants access to the handset without further authentication of the authenticated IMEI.

But, Portalier teaches an encrypted communication channel between the first data storage device and the second data storage device (pg. 3, lines 21-26) and access, by the handset, the communication network using the authenticated IMEI, wherein the network grants access (permit use of mobile telephone) to the handset without further authentication of the authenticated IMEI (pg. 7, lines 20 - pg. 8, lines 13). Thus, it would have been obvious to one of ordinary skill in the art at time the invention

was made to modify the terminal equipment teachings of Simmons with the teachings of Portalier to achieve an efficient, reliable, and secure communication link between devices in communication system.

As **to claims 2 and 9**, Simmons teaches wherein the operating system (fig. 1, Microcontroller) controls the transmission of the IMEI to a mobile telephone operator by means of a secure OTA channel (pg. 3, pp 0038, lines 4-8).

As **to claim 4**, Simmons teaches wherein the secure electronic module is a UICC (SIM card) (pg. 3, pp 0028).

As **to claim 6**, Simmons teaches wherein the secure electronic module and the storage support module store encryption keys that are used to encrypt the secure communication channel (pg. 3, pp 0041, lines 1-10, and pp0042).

As **to claims 7, 11, and 13-16**, Simmons teaches wherein the secure electronic module device blocks the use of the handset when a false IMEI is detected (pg. 3, pp 0038 lines 4-7, and pp 0040).

Claims 10 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Simmons (US Publication No. 20040043792) in view of Portalier et al (UK Patent Application GB2355892) as applied to claim 9 above, and further in view of Applicant's Admitted Prior Art (AAPA).

As **to claims 10 and 17**, Simmons and Portalier teaches the limitations of claim 9 as discussed above. However, they fail to teach the operator comparing the IMEI with

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a black list of stolen handsets. Applicants Admitted Prior Art (AAPA) as set forth in Paragraph [0003] of the specification background teaches these limitations of claims 10 and 17 (blocking). Thus, it would have been obvious to one of ordinary skill in the art at time the invention was made to include the teachings the Applicants Admitted Prior Art in the securing method of Simmons and Portalier in order to achieve the goal of efficiently securing a mobile terminal from an unauthorized use.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to OMONIYI A. OBAYANJU whose telephone number is (571)270-5885. The examiner can normally be reached on Mon - Fri, 7:30 - 5:00PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jinsong Hu can be reached on 571-272-3965. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/O. A. O./
Examiner, Art Unit 2617

/Jinsong Hu/

Supervisory Patent Examiner, Art Unit 2617